

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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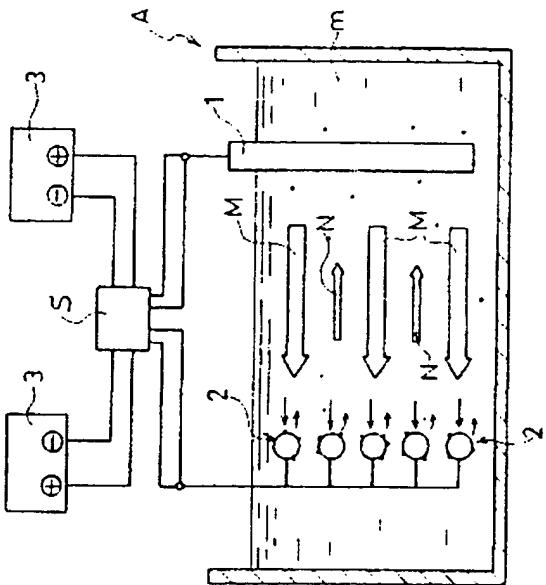
APPLICATION DATE : 05-11-86  
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APPLICANT : TANAKA ELECTRON IND CO LTD;

INVENTOR : KOBAYASHI KOKICHI;

INT.CL. : C25D 5/18

TITLE : METHOD FOR TINNING ELECTRONIC PARTS



ABSTRACT : PURPOSE: To inhibit the formation of whiskers on the tinned surfaces of electronic parts by supplying electric current between an electrode plate of metallic Sn and the electronic part to be tinned in a tinning soln. in opposite directions with a specified period.

CONSTITUTION: A tinning soln. (m) is poured in a tinning cell A and an electrode plate 1 of metallic Sn and electronic parts 2 to be tinned are immersed in the soln. (m). The polarity of power sources is changed over with a change-over switch S fitted with a timer. Normal electric current M flowing from the Sn electrode 1 to the parts 2 is first supplied at  $0.2\text{--}3\text{A}/\text{dm}^2$  current density for  $t_1$  sec and then reverse electric current N flowing from the parts 2 to the Sn electrode 1 is supplied at  $0.1\text{--}1.5\text{A}/\text{dm}^2$  current density for  $(0.01\text{--}0.5)t_1$  sec. The parts 2 are tinned by repeatedly supplying the normal and reverse electric currents and the formation of whiskers on the resulting Sn layers on the surfaces of the parts 2 is prevented.

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